

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re PATENT APPLICATION of:

Xiong Zhang et al.

Confirmation Number: 3694

Application No.: 09/700,236

Group Art Unit: 1765

Filed: May 9, 2001

Examiner: Song, Matthew J.

For: CRYSTAL GROWTH METHOD FOR GROUP-III NITRIDE AND RELATED

COMPOUND SEMICONDUCTORS

## **DECLARATION UNDER 37 CFR 1.131**

Mail Stop AMENDMENT Commissioner for Patents P.O. Box 1450 Arlington, VA 22313-1450

Sir:

- I, Chua Soo Jin, one of the inventors of the above-identified patent application, declare as follows:
- I am and have been a Professor in the Department of Electrical and Computer
   Engineering at the National University of Singapore since 1997.
- 2. I obtained a doctorate in electrical engineering from the University of Wales in 1977, and as an undergraduate at the University of Singapore received class honors.
  - 3. I have authored or co-authored 230 international journal publications.
- 4. I have extensive experience in electrical engineering and materials research, as evidenced by my curriculum vitae which is attached as Exhibit A.
- 5. As a result of my experience and knowledge, I declare that it is common knowledge to those of ordinary skill in the art in the light-emitting semiconductor area that only

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core layers (i.e., quantum wells) will emit light and all the other layers in the device (i.e., intermediate layers, clad layers, etc.) will not emit light. Thus, all multi-layered buffers as described in the present application (Serial No. 09/700,736) will be recognized by those of ordinary skill in the art as "non-light emitting" layers.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Respectfully submitted,

Date:

22/9/05

Chua Soo Jin

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## **EXHIBIT A**

CHUA SOO JIN

16 Feb 05

Position/Title:

Professor, Department of Electrical and Computer Engineering

(since 1997)

Deputy Director, Singapore MIT-Alliance (Since 1999)

Deputy Director, Institute of Materials Research and Engineering (Since

2003)

Assistant Director, Institute of Microelectronics (1991-1995)

Education:

PhD, Wales (1977)

BEng (1st Class Hons, Electrical Engineering), University of Singapore

(1974)

Positions and Honors (chronological order)

University of Singapore, Faculty of Engineering Book Prizes (1st

and 3<sup>rd</sup> Year)

University of Wales Research Scholarship 1974 -1977 Deutscher Akademischer Austauschdienst Scholarship 1982

MINDEF-NUS Award for outstanding contributions to Joint R&D, Jan 1995

Teaching Excellence Award 1997/98, NUS
Outstanding University Researcher 1998, NUS

Participation in educational programmes:

1. Co-teaching Properties of Materials SMA 5102, Singapore-MIT

2. Co-teaching Optoelectronics in Dept of Electrical and Computer Engineering, NUS

3. Teaching Engineering Mathematics in BTech

Participation in the research programmes:

- 1. Opto and Electronics Cluster, Institute of Materials Research and Engineering
- 2. NUS Nanoscience and Nanoengineering Initiative

Research Output:

- 1. 230 international journal publications
- 2. 20 patents filed; 4 granted
- 3. 14 PhDs trained; 5 in progress

Professional Experience:

1. IEEE Singapore Section:

Chairman, Continuing Education Committee, 1981 - 1983

Section Deputy Chairman, 1983 - 1984

Section Chairman, 1985 - 1986.

2. IEEE Region 10 (Asia Pacific)

Chairman, Continuing Education Committee - 1988

3. Chairman/co-chairman of organizing committee of 7 International Conferences

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